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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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26161 7590 03/19/2007 FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			EXAMINER OCHOA, JUAN CARLOS	
			ART UNIT 2123	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE 3 MONTHS			MAIL DATE 03/19/2007	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary

Application No.

10/826,630

Applicant(s)

PINTO ET AL.

Examiner

Juan C. Ochoa

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 April 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-40 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 16 April 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date See Continuation Sheet.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

Continuation of Attachment(s) 3. Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :2/28/05,5/27/05,7/17/06,12/18/06.

DETAILED ACTION

1. Claims 1–40 are presented for examination.

Information Disclosure Statement

2. The information disclosure statement filed 2/28/05 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

3. The information disclosure statement filed 2/28/05 lists NPL in <http://www.spss.com/Clementine/index.htm>, <http://www.spss.com/spssbi/directresponse/clementinewebinar/index.cfm?dcode=d4183>, <http://www.sas.com/technologies/analytics/datamining/miner>, and <http://www.jmp.com>. This information referred to has not been considered since such NPL most likely varies with time, it's not dated, and it is accessed via an embedded hyperlink and/or other form of browser-executable code. Applicant is required to delete the embedded hyperlink and/or other form of browser-executable code and to provide the NPL.

4. The information disclosure statement filed 5/27/05 fails to comply with 37 CFR 1.98(a)(1), which requires the following: (1) a list of publications, applications, or other information submitted for consideration by the Office. The information disclosure

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statement has been placed in the application file, but the information referred to therein has not been considered.

5. The information disclosure statements filed 2/28/05, 5/27/05, 7/17/06, and 12/18/06 contain a large number of references submitted for consideration that appear to be cumulative and are consistent with the progress in the art. In view of the number of references in this application, the Applicant is requested to identify any specific references, features, sections or figures in the references cited which are believed to have particular significance in the prosecution of this application or which are considered material to the patentability of the pending claims, for further consideration by the Examiner. After glancing through the excessive number of references submitted, Examiner found some of them as unrelated to the limitations set forth in the instant application.

Drawings

6. New corrected drawings in compliance with 37 CFR 1.121(d) are required in this application because the informal drawings of Figs. 3, specifically reference characters, are not of sufficient quality.

7. Applicant is advised to employ the services of a competent patent draftsman outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid

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abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

8. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because:

9. As to Figure 1, reference character "24" has been used to designate both "deployment of the model" and "model development platform".

10. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

11. Claims 1, 3, 4, 7, 11, 12, 15, 18, 24, 27, 28, 36, 37, 38, and 40 are objected to because of the following informalities:

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12. Claim 1 lines 7 and 8 refer to "population", would be better as "population of predictor variables" to avoid any possible antecedent issues.

13. Claim 1 line 12 refers to "model", would be better as "possible model" to avoid any possible antecedent issues.

14. Claim 3 lines 2 and 3 refer to the term "the most significant predictor variables". Term may raise enablement issues, because no way of determining significance of predictor variables is claimed.

15. Claim 4 line 3 refers to the term "associated dataset". Term lacks antecedent basis.

16. Claim 7 line 3 includes the term "a lift chart with a link to the lift chart", meaning is unclear. Examiner interprets as either "a lift chart" or "a link to the lift chart" for examination purposes.

17. As to claims 15 and 18, they contain the same "lift chart with a link to the lift chart", deficiency as set forth above.

18. Claim 7 lines 3–4 include the term "a response comparison chart ... and a link to the response comparison chart", meaning is unclear. Examiner interprets as either "a response comparison chart" or "a link to the response comparison chart" for examination purposes.

19. Claim 11 line 3 refers to the term "fit". Term lacks antecedent basis.

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20. Claim 12 line 1 includes the term "including a enabling a determination", meaning is unclear.

21. Claims 24 and 27 line 2 refer to the term "historical data set" and "historical dataset". Term lacks antecedent basis.

22. Claim 28 line 2 includes the misspelled term "use". Examiner interprets as "user" for examination purposes.

23. Claims 38 and 40 use the acronym or variable "NPV", the first use of an acronym or variable in a claim should be defined to avoid any possible indefiniteness issues.

24. Appropriate correction is required. No new matter may be introduced in the required correction.

25. Claims 18, 27, and 28 recite the limitation "subsets". The claims language does not specify how data is partitioned into "subsets".

26. Claims 20 and 21 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

Applicant is required to cancel the claim(s) or amend the claim(s) to place the claim(s) in proper dependent form. As per claim 18, a link to the (non-)cumulative lift chart already causes display of the (non-)cumulative lift chart, that's what a link does.

27. Claims 36 and 37 are objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim.

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Applicant is required to cancel the claim(s) or amend the claim(s) to place the claim(s) in proper dependent form. As per claim 34, the subject matter is a method.

Claim Rejections - 35 USC § 112

28. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

29. Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter, which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. How to determine the “most potent” variables for the target goal is not elaborated in the instant application. The subject matter description of “most potent” in the specification amounts to repetition/instantiation of “most potent” (see page 2, lines 8–10 of the instant application). No definition of “potency” is elaborated in the description.

30. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

31. Claims 29, 36, and 37 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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32. Claim 29 recites the limitation "project database". There is insufficient antecedent basis for this limitation in the claims.

33. Claims 36 and 37 are directed to a system, claim 34 is directed to a method, it is unclear if applicant is claiming a system or a method because the claims as written are directed to both, placing them into two separate and distinct categories of patentable subject matter.

34. Claim 37 recites the limitation "using the computed propensities as indices of the scores". There is insufficient antecedent basis for this limitation in the claims.

35. Claims 31–33 and 38–40 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential steps, such omission amounting to a gap between the steps. See MPEP § 2172.01. In claim 31, the omitted step is: producing/generating, before displaying to a user, a lift chart (of some parameter vs. another parameter), monotonicity scores, and concordance scores associated with each step in a step-wise model fitting process.

36. Dependent claims inherit the defect of the claim from which they depend.

Claim Rejections - 35 USC § 101

37. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

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38. Claims 1–30 and 34–37 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

39. Specifically, in claim 1 there is no tangible result claimed, only an abstract idea. Generate does not equate to tangibility.

40. Specifically, claim 1 does not produce a useful, concrete and tangible result if the model does not generalize to the data other than the subsample.

41. Specifically, claim 34 does not produce a useful, concrete and tangible result. The claim, more specifically "enabling a user to combine at least two variables", not being capable of imparting functionality, fails to reflect any practical utility. Thus, there would be no "useful" result upon execution. Enabling a user to combine at least two variables does not equate to concreteness nor tangibility.

42. Dependent claims inherit the defect of the claim from which they depend.

Claim Rejections - 35 USC § 102

43. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –
(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

44. Claims 1–40, are rejected under 35 U.S.C. 102(b) as being anticipated by Cabena et al., (Cabena hereinafter), Intelligent Miner for Data Applications Guide. (See IDS dated 12/18/06).

45. As to claim 1, Cabena discloses a machine-based method comprising in connection with a project in which a user generates a predictive model based on historical data about a system being modeled (see chapter 1.5.1, Pages 9-11): selecting variables having at least a predetermined level of significance from a pool of potential predictor variables associated with the data, to form a population of predictor variables (see page 101, 2nd and 3rd paragraphs), extending the population to include non-linear interactions of variables and extending the population to include linear and non-linear extensions with remaining previously excluded variables (see page 93, 2nd paragraph), generating a possible model of the extended population of variables using a subsample of the data (see "Feature Selection" and "Train and Test" in page 95), determining whether the model generalizes to the data other than the subsample (see page 101, last paragraph), if so, applying the possible model to all of the data to generate a final model, and cross-validating the final model using random portions of the data (see page 97, last paragraph).

46. As to claim 2, Cabena discloses a method also including displaying information to the user of the size of the pool of predictor variables (see "Visualizations with only one or two regions" in page 101, 3rd paragraph, line 2).

47. As to claim 3, Cabena discloses a method also including enabling a user to point and click to reduce or extend the size of the pool of predictor variables, retaining only the most significant predictor variables (see "remove the strong variables from the chosen input fields and split the data into multiple files based on the segmentation by the strong variables as indicated by the tree" in page 101, 3rd paragraph, lines 4-7).

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48. As to claim 4, Cabena discloses a method in which the user is enabled to invoke an automatic process to select a class of models most suitable to the pool of predictor variables for the associated dataset (see page 118, last paragraph).

49. As to claim 5, Cabena discloses a method in which the user is enabled to point and click to adjust the model selection criterion to retain only the most potent variables for the target goal (see page 133, 1st paragraph).

50. As to claim 6, Cabena discloses a method in which the user is enabled to point and click to cause display of information about the model performance (see "algorithm outputs a summary screen showing the mean and root mean square error" in page 100, 7th paragraph and/or page 101, last paragraph, lines 1–3).

51. As to claim 7, Cabena discloses a method in which the information about the model performance includes at least one of: a statistical report card with a link to the statistical report chart, a lift chart with a link to the lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs), a response comparison chart for each decile for each predictor variable in the model, and a link to the response comparison chart.

52. As to claim 8, Cabena discloses a method in which invocation of the link to the statistical report card causes display of the statistics of model performance (see "algorithm outputs a summary screen showing the mean and root mean square error" in page 100, 7th paragraph).

53. As to claim 9, Cabena discloses a method in which invocation of the link to the lift chart causes display of a non-cumulative lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs).

54. As to claim 10, Cabena discloses a method in which invocation of the link to the response comparison chart causes display of a response chart for each predictor variable in the model for each segment of interest (see "Method 2" in page 119, 3rd paragraph).

55. As to claim 11, Cabena discloses a method in which a user is enabled to choose interactively at least one performance criterion change or transformation or interaction of variables to improve the fit of the model (see "Maximum tree depth" in page 97, 4th paragraph).

56. As to claim 12, Cabena discloses a method also including a enabling a determination whether the model generalizes to the data other than the subsample, and, if so, applying the possible model to all of the data to generate a final model, and cross-validating the final model using random portions of the data (see page 97, last paragraph).

57. As to claim 13, Cabena discloses a method in which the user is enabled to select at least one validation dataset and invoke a model process validation method (see "Value Prediction with RBF" in pages 97 and 98).

58. As to claim 14, Cabena discloses a method in which the user is enabled to point and click to cause display of information about the model process validation (see "Results Visualization" in page 100, 6th paragraph).

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59. As to claim 15, Cabena discloses a method in which the information about the model process validation includes at least one of: a statistical report card with a link to the statistical report chart, a cumulative lift chart with a link to the cumulative lift chart and a non-cumulative lift chart with a link to the non-cumulative lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs).

60. As to claim 16, Cabena discloses a method in which the user is enabled to select at least one machine automated model development process applied to the entire dataset for a validated model process (see "Network architecture" in page 99, 3rd paragraph).

61. As to claim 17, Cabena discloses a method in which the user is enabled to point and click to cause display of information about the performance of the validated model process applied to the entire set of historical data (see page 101, last paragraph, lines 1–3).

62. As to claim 18, Cabena discloses a method in which the information about the model performance for two independent data subsets includes at least one of: a statistical report card with a link to the statistical report chart, a cumulative lift chart with a link to the cumulative lift chart and a non-cumulative lift chart with a link to the non-cumulative lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs).

63. As to claim 19, Cabena discloses a method in which the invocation of the link to the statistical report card causes display of the statistics of model process validation

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(see "algorithm outputs a summary screen showing the mean and root mean square error" in page 100, 7th paragraph and/or page 101, last paragraph, lines 1–3).

64. As to claim 20, Cabena discloses a method in which the invocation of the link to the cumulative lift chart causes display of a cumulative lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs).

65. As to claim 21, Cabena discloses a method in which the invocation of the link to the cumulative lift chart causes display of a non-cumulative lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs).

66. As to claim 22, Cabena discloses a method in which the final model and the model process validation results are stored persistently (see "Processing settings objects always ... create output data in a database" in page 24, "Processing Functions", 3rd paragraph, lines 1–2).

67. As to claim 23, Cabena discloses a method also including enabling the user to observe the number of predictor variables available for the model (see "remove the strong variables from the chosen input fields and split the data into multiple files based on the segmentation by the strong variables as indicated by the tree" in page 101, 3rd paragraph, lines 4–7).

68. As to claim 24, Cabena discloses a method in which a model method from a library of model methods most suitable to modeling the historical data set is automatically selected (see page 11, 1st paragraph).

69. As to claim 25, Cabena discloses a method also including enabling the user to observe the performance of the model by means of links to a plurality of statistical and graphical reports (see "Results Visualization" in pages 100 and 101).

70. As to claim 26, Cabena discloses a method also enabling the user to select a means of validating the model development process (see "Value Prediction with RBF" in pages 97 and 98).

71. As to claim 27, Cabena discloses a method also enabling the user to observe the performance of the model for the training and validation subsets of the historical dataset (see "algorithm outputs a summary screen showing the mean and root mean square error" in page 100, 7th paragraph and/or page 101, last paragraph, lines 1–3).

72. As to claim 28, Cabena discloses a method also enabling the user to invoke at least one validated model development process to produce a final model enabling the use to observe the performance of the final model on at least two independent subsets (see page 101, last paragraph, lines 1–3).

73. As to claim 29, Cabena discloses a method enabling the persisting of the final model and intermediate results to the project database see "Processing settings objects always ... create output data in a database" in page 24, "Processing Functions", 3rd paragraph, lines 1–2).

74. As to claim 30, Cabena discloses a method enabling the final model to be applied to scoring at least one non-historical dataset wherein the propensity computed by the model is indexed by the score (see page 11, 2nd paragraph).

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75. As to claim 31, Cabena discloses a machine-based method comprising in connection with a project in which a user generates a predictive model based on historical data about a system being modeled (see chapter 1.5.1, Pages 9-11), displaying to a user a lift chart (see page 101, last paragraph, lines 1–5 and page 105, 1st and 2nd paragraphs), monotonicity (see page 101, last paragraph, last 3 lines and page 119, 2nd bullet from the bottom), and concordance scores (see Chapter 1.5.1, Pages 9-11) associated with each step in a step-wise model fitting process (see page 98, 2nd paragraph).

76. As to claim 32, Cabena discloses a method also including enabling the user to observe changes in the fit of the model as variables associated with the data are added or removed from a predictor set of the variables (see "Maximum tree depth" in page 97, 4th paragraph).

77. As to claim 33, Cabena discloses a method also including enabling the user to terminate the fitting of the model when the fitting process reaches an optimal point (see "Maximum number of passes" in page 98, 2nd paragraph).

78. As to claim 34, Cabena discloses a machine-based method comprising receiving from separate sources, sets of variables representing historical data about a system being modeled (see page 92, paragraphs 2–5), and enabling a user of a model generation tool to combine at least two of the variables from the sets of variables (see "Okay Customer Set", "Good Customer Set" and "Create Objective Variable" items in page 90, Fig. 46).

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79. As to claim 35, Cabena discloses a method in which enabling the user to combine the variables includes providing a user interface that enables the user to identify the variables to be combined (see page 21, 1st paragraph).

80. As to claim 36, Cabena discloses a method in which the system comprises behavior of prospective or current customers with respect to products or services of a company and the method also includes adjusting outcome variables to normalize response rates across products or services with different response rates (see page 90, 2nd line from the bottom to page 91, 2nd line).

81. As to claim 37, Cabena discloses a method in which the system comprises behavior of current customers with respect to retention of a current service or product of a vendor and the method also includes adjusting variables to normalize response rates across products or services with different response rates, using the computed propensities as indices of the scores (see page 90, 2nd line from the bottom to page 91, 2nd line).

82. As to claim 38, Cabena discloses a method also comprising determining a course of action to yield the most positive NPV outcome (see "the most positive NPV outcome" as "increase its profitability" in page 32, 3rd paragraph).

83. As to claim 39, Cabena discloses a method in which the determining includes selection of a mix of channel (see page 30, last paragraph) and product combinations (see "product associations" in page 32, 3rd paragraph).

84. As to claim 40, Cabena discloses a method in which the determining includes predicting retention in combination with response rate to predict NPV (see page 28, 2nd paragraph).

Conclusion

85. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

86. U.S. Patent 6,430,539 teaches analyzing historical consumer financial behavior to accurately predict future spending in specifically identified data-driven industry segments (see col. 1, lines 6–11). (See IDS dated 12/18/06).

87. U.S. Patent 6,879,971 teaches processing data to account for time synchronization, time-delays transforms and variable time-delays prior to input to a network for either training of the network or running of the network, i.e. predictive system models (see col. 1, lines 23–28). (See IDS dated 12/18/06).

88. WO 03/005232 teaches presentations and data mining models associated in a repository through references in the presentations. A request including a customer identification and an event identification is received for a presentation and is processed to retrieve the appropriate presentation, which is delivered to the customer (see Abstract). (See IDS dated 12/18/06).

89. Examiner would like to point out that any reference to specific figures, columns and lines should not be considered limiting in any way, the entire reference is considered to provide disclosure relating to the claimed invention.

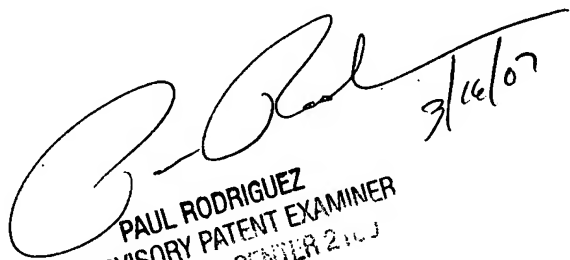
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90. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Juan C. Ochoa whose telephone number is (571) 272-2625. The examiner can normally be reached on 7:30AM - 4:00 PM.

91. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Rodriguez can be reached on (571) 272-3753. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

92. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*** 3/15/07



PAUL RODRIGUEZ
SUPERVISORY PATENT EXAMINER
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3/16/07